

A Comparison of Land Application Setback Requirements for Various Regulatory Programs in PA

	Sensitive Area	Act 38 Nutrient Management Plans	Act 38 Nutrient Balance Sheets	DEP Manure Management Plans	Food Processing Residual Setbacks	Biosolids
Surface Water	Stream Lake Pond	100 feet, or • 35 feet with a permanent vegetative buffer	150 feet, or • 100 feet with a P Index evaluation of the field, or • 35 feet with a permanent vegetative buffer and with a P Index evaluation of the field	100 feet, or • 50 feet, IF current soil test <200 ppm P, no-till practices are used, and cover crops are planted when residue is removed, or • 35 feet with a permanent vegetative buffer	100 feet	100 feet perennial stream • 33 feet intermittent stream
Sinkholes	Existing Open Sinkhole	100 feet, or • 35 feet with a permanent vegetative buffer	100 feet, or • 35 feet with a permanent vegetative buffer	100 feet	100 feet	100 feet
Wells	Private Drinking Well or Spring (active wells)	100 feet	100 feet	100 feet	300 feet • Upgrade of a surface water source 1,000 feet	300 ft. from an occupied dwelling • 300 feet unless written waiver allowing closer
	Public Water Well	100 feet unless wellhead authority requires larger setback	100 feet unless wellhead authority requires larger setback	100 feet unless wellhead authority requires larger setback	300 feet • Upgrade of a surface water source 1,000 feet	300 ft. from an occupied dwelling • 300 feet unless written waiver allowing closer
Channels	Within the channel of a non-vegetated concentrated water flow area such as a swale, gully, or ditch.	No specific requirements. • Application in these high-risk areas is strongly discouraged.	No specific requirements. • Application in these high-risk areas is strongly discouraged.	Never	Never	Never
Maximum Rate	Maximum Application Amount during one pass (rates may be higher but ground must dry between passes).	9,000 gal/acre liquid manure	9,000 gal/acre liquid manure	9,000 gal/acre liquid manure when not winter • <u>Maximum Total Winter Rates</u> • 5,000 gal/acre liquid manure • 20 tons/acre solid non- poultry manure • 3 tons/acre dry poultry manure	None Cannot cause ponding, runoff nor exceed agronomic loading rates	None
Fall	Fall Application	Minimum of 25% ground cover/residue or an established cover crop, or • Inject or incorporate manure within 5 days with minimum soil disturbance	Minimum of 25% ground cover/residue or an established cover crop, or • Inject or incorporate manure within 5 days with minimum soil disturbance	No specific requirements. • Strongly encouraged to follow the specific practices outlined for Act 38.	FPR Land Applications of liquids must be performed in a manner that prevents ponding or standing accumulations. • Land-applied material on areas with inadequate litter or vegetation must be incorporated within 24 hours. • Surface application on harvested forage crops must be performed within 10 days following cutting. • Avoid spreading FPRs on land where food crops that are eaten raw by humans are being grown when potential pathogen transmission is a concern.	No specific requirements

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Winter	<p><b>Winter Application</b></p> <p>For each type of plan, fields receiving winter applications must be listed in the plan, and winter is defined as:</p> <ol style="list-style-type: none"> <li>1) December 15 – February 28, or</li> <li>2) Ground frozen 4 inches or deeper, or</li> <li>3) Ground is snow covered.</li> </ol> <p><b>Winter application is discouraged.</b></p> <p>See “Maximum Rates” guidance below.</p>	<p>All setbacks above with the following additions:</p> <ul style="list-style-type: none"> <li>• 100 feet from above-ground inlet to agricultural drainage system where surface flow is toward the inlet</li> <li>• 100 feet from wetland identified on National Wetlands Inventory if that wetland is within a 100 year floodplain of an Exceptional Value stream and surface flow is toward the wetland</li> <li>• Minimum of 25% ground cover/residue or an established cover crop</li> </ul>	<p>All setbacks above with the following additions:</p> <ul style="list-style-type: none"> <li>• 100 feet from above-ground inlet to agricultural drainage system where surface flow is toward the inlet</li> <li>• 100 feet from wetland identified on National Wetlands Inventory if that wetland is within a 100 year floodplain of an Exceptional Value stream and surface flow is toward the wetland</li> <li>• Minimum of 25% ground cover/residue or an established cover crop</li> </ul>	<p>All setbacks above with the following additions:</p> <ul style="list-style-type: none"> <li>• 100 feet from stream, lake or pond regardless of conservation practices (no 35 feet or 50 feet options).</li> <li>• 100 feet from above-ground inlet to agricultural drainage system where surface flow is toward the inlet</li> <li>• Minimum of 25% ground cover/residue or an established cover crop</li> <li>• No application on slopes greater than 15%. (A, B, C slopes acceptable)</li> </ul>	<p>Not permitted on snow-covered ground</p> <ul style="list-style-type: none"> <li>• Land application on frozen ground may occur when no storage facility is available. Slopes may not exceed 3% and sufficient vegetation must exist to prevent runoff.</li> </ul>	<p>No applications when the soil is frozen or snow covered except as permitted by DEP</p>
Additional Limitations for FPRs / Biosolids / CAFOs	<p><b>Additional Setbacks and Limitation</b></p>	<p>CAFO's (All setbacks above for Act 38 Nutrient Management Plans with the following additions)</p> <ul style="list-style-type: none"> <li>• Conduits to Surface Water - 100 feet</li> <li>• *</li> <li>• Open Tile Line Intakes structures - 100 feet</li> <li>• *</li> <li>• Agricultural Wellheads - 100 feet</li> <li>• *</li> <li>• Non-Vegetated channels with defined bed and bank that outlet to surface water - 100 feet</li> </ul>	<p>None</p>	<p>None</p>	<ul style="list-style-type: none"> <li>• 50 feet Property Line</li> <li>• 1000 feet upgrade of a surface water source</li> <li>• 100 feet Exceptional Value Wetlands</li> <li>• 300 feet Occupied Buildings</li> <li>• 25 feet Perimeter of an un-drained depression and Bedrock outcrop</li> <li>• ≥20 inches Soil Depth to Bedrock</li> <li>• ≥12 inches for FPRs stabilized by recognized PSRP and PFRP methods</li> <li>• ≥4 feet Depth to regional ground water</li> <li>• Soil Drainage ≥20 inches to mottling ≥12 inches for FPRs stabilized by recognized PSRP and PFRP methods</li> <li>• Direct subsurface injection requires a minimum 20 inches soil depth</li> <li>• Maximum Slope ≤15% (15%-20% with well-established cover crop or crop residue)</li> </ul>	<ul style="list-style-type: none"> <li>• 300 feet Occupied Buildings</li> <li>• 100 feet Exceptional Value Wetlands</li> <li>• Within 11 inches of the seasonal high water table, nor within 3.3 feet of the regional groundwater table</li> <li>• Sites that exceed 25 percent slope</li> <li>• Biosolids may not be applied unless the soil pH is 6.0 or greater unless approved by DEP</li> </ul>

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<p><b>Manure stacks that are placed in or near crop fields for an extended period of time.</b></p> <p><b>Does not apply to:</b></p> <p>1) Manure stacked on the operation farmstead, or</p> <p>2) Manure stacked on improved waste stacking facilities, or</p> <p>3) Manure composting sites, or</p> <p>4) Mortality composting sites, or</p> <p>5) Emergency related manure stacking.</p> <p><b>Note: All setbacks and infield manure stacking sites must be accurately delineated on the farm map as required by each plan type.</b></p>	<p>Stacked manure must be land applied within 120 days or by the next growing season, whichever is less or covered with an impermeable cover within 3 weeks of stacking.</p> <p>•</p> <p>Manure stacks should not be located within 100 feet of streams, lakes, ponds, and active water wells.</p> <p>•</p> <p>Manure stacks should not be located within water concentration flow areas or on soils where the seasonal high water table is less than 3 feet.</p> <p>•</p> <p>Uncovered manure stacks should be cone or windrow shaped and not be located on excessively drained soils, above subsurface drain tiles, on slopes greater than 8%, and, when on slopes between 3 and 8% no more than 100 feet, from the top of the slope.</p> <p>•</p> <p>Manure stack sites must be rotated so that no site is used more than once every 4 years.</p>	<p>Stacked manure must be land applied within 120 days or by the next growing season, whichever is less or covered with an impermeable cover within 3 weeks of stacking.</p> <p>•</p> <p>Manure stacks should not be located within 100 feet of streams, lakes, ponds, and active water wells.</p> <p>•</p> <p>Manure stacks should not be located within water concentration flow areas or on soils where the seasonal high water table is less than 3 feet.</p> <p>•</p> <p>Uncovered manure stacks should be cone or windrow shaped and not be located on excessively drained soils, above subsurface drain tiles, on slopes greater than 8%, and, when on slopes between 3 and 8% no more than 100 feet, from the top of the slope.</p> <p>•</p> <p>Manure stack sites must be rotated so that no site is used more than once every 4 years.</p>	<p>Manure to be stacked longer than 120 days must be covered with an impermeable cover or stacked on a properly improved stacking pad.</p> <p>•</p> <p>Manure stacks should not be located within 100 feet of streams, lakes, ponds, and active water wells.</p> <p>•</p> <p>Manure stacks should not be located in water concentration flow areas, on slopes greater than 8%, and no more than 100 feet from the top of the slope, and where possible, direct upslope water away from the stacking area.</p> <p>•</p> <p>Manure stacks must be dry enough to maintain a stack height of at least 4 feet.</p> <p>•</p> <p>Manure stack sites must be rotated so that no site is used every year.</p>	<p>FPR's must be stored in a manner that prevents pollution of local water resources and avoids creating nuisance conditions. Surface water running into storage areas (run-on) must be eliminated and runoff must be controlled so that surface and ground water is not polluted.</p> <p>•</p> <p>Storage of all FPRs should comply with Chapter 299 of the Residual Waste Regulations</p> <p><u>Composting Setbacks</u></p> <ul style="list-style-type: none"> <li>• Not within 100 year floodplain</li> <li>• 300 feet Exceptional value wetland</li> <li>• 100 feet wetland</li> <li>• 100 feet sinkhole</li> <li>• 300 feet occupied dwelling</li> <li>• 100 feet Perennial Stream</li> <li>• 50 feet property line</li> <li>• ¼ mile upgradient and 300 feet downgradient of Private or Public water source</li> <li>• 4 feet of water table</li> </ul>	<p>Not within 300 feet of an occupied dwelling, unless a waiver is in place</p> <p>•</p> <p>Located on slopes less than 3% unless otherwise approved by DEP</p>

Stacking